OCS series diagnostic device - instruction

The OCS series diagnostic device - passenger seat occupancy sensor tester - is an advanced diagnostic device designed to diagnose faults in the SRS system. It can be used to confirm or rule out seat occupancy sensor failure in the vehicle.

The OCS series diagnostic device is not a factory device or replacement for the original seat occupancy sensor. After performing diagnostics, disconnect the device and reconnect the original seat occupancy sensor.

Once connected to the SRS system in the car, the device communicates with the airbag control unit and sends the same signal as the seat occupancy sensor when an adult is sitting on the seat.

If it is possible to delete the passenger seat occupancy sensor error from the airbag control unit after connecting the tester to the SRS system, then it means that the seat occupancy sensor in the car is damaged.

If the error cannot be cleared, then it means that a different sensor is defective or there is a fault not related to the seat occupancy sensor, e.g. the car's electrical system or the airbag control unit itself is damaged.

The OCS series diagnostic device - seat occupancy sensor tester - is not intended for permanent installation in a car.

The extended version of the tester also includes a seat belt buckle tester. It allows you to confirm or rule out damage to the seat belt buckle sensor in the car. When connected to the SRS system in the car, the device communicates with the airbag control unit and sends the same signal as the original seat belt buckle when the seat belt is fastened.

If it is possible to erase the seat belt buckle sensor error from the airbag control unit after connecting the tester to the SRS system, then it means that the seat belt buckle is damaged.
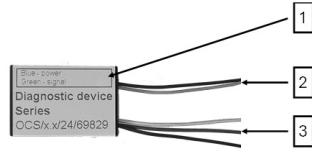
If the error cannot be erased, then it means that a different sensor is defective or there is a fault not related to the seat belt buckle sensor.

Product Overview

1. Control LEDs:
- Blue: power
- Green: communication

2. Seat belt buckle tester wires. They may have different colors depending on the tester version:
- Yellow and Blue
- Red and Black

3. Seat occupancy sensor tester wires:
- Red: +12V
- Brown: GND
- White: signal

Depending on the tester variant, the wires may be terminated in the following way:
1. No termination - the wires are insulated at the ends
2. Metal pins - the same pins as used in the original sensors in the car
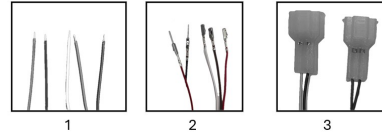3. Plugs/Connectors - the same plugs as used in the original sensors in the car

Photo #2 shows example of the pins. Photo #3 show example of the plugs. Plugs may vary depending on the tester version.

Safety Information

After unpacking, visually inspect the condition of the device. If the device appears damaged, do not use it. Contact seller or manufacturer.

1. Important note
Please read this manual carefully. This is a necessary condition for safe and proper use of the device. Keep this manual as a source of information. Please follow the safety rules and warnings.

2. Intended use
Compliance with the instructions for use in accordance with the intended purpose is a condition for proper and safe use of the device. The device must be installed and used as described in this manual.

3. User group restriction
This device may only be operated by adults with the appropriate knowledge and authorizations to perform work related to the SRS system in a car. Children and minors must not play with the device.

Installation process

General safety rules
Installation should be performed by a person with knowledge of SRS systems and with the appropriate wiring diagrams for the vehicle to which the tester is being connected.

Before starting work, perform the following steps:
- Turn off the ignition
- Properly disconnect the ground cable from the main battery
- Properly disconnect the ground cable from the additional battery (if present)
- Wait at least 5 seconds.

When the work is complete:
- Ensure that all SRS components have been correctly installed (if disconnected during tester connection)
- Connect all connectors disconnected during installation
- Connect all cables disconnected during installation

Rules of conduct and safety rules during test
Only perform the system test when all components and connectors are connected. Use only approved test equipment. Perform the test without passengers inside. The use of non-approved diagnostic equipment can lead to the airbags or belt tensioners being triggered. Caution! Risk of injury due to ejection of components with uncontrolled triggering of airbags and belt tensioners. A damaged device or damaged wires are dangerous, do not use a damaged device. If the device or the wiring is damaged, contact your seller or the manufacturer.

Connecting the seat occupancy sensor tester
Read the general safety rules and rules of conduct before starting work!

1. Find the seat occupancy sensor connection point to the car's installation under the seat. Depending on the tester version (wires with pins, plug or without termination), proceed as follows:
Wires with pins:
- Check whether the colors of the wires in the original sensor are the same as in the tester. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below.
- Disconnect the seat occupancy sensor plug from the car's installation.
- Note which wire is in which hole.
- Take the wires out of the seat occupancy sensor plug.
- Insert the wires of the tester into the plug in the same order as you previously noted.
- Connect the plug to the car's installation.

Wires with plug:
- Check whether the colors of the wires in the original sensor are the same as in the tester and whether the wires are positioned in the plug in the same way. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below. *Attention! In Mercedes cars, there may be other colors of wires. Refer to the photo documentation of the seller or manufacturer.*
- Disconnect the seat occupancy sensor plug from the car's installation.
- Connect the plug of the tester to the car's installation.

Wires without termination:
- Check whether the colors of the wires in the original sensor are the same as in the tester. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below.
- Cut the seat occupancy sensor wires.
- Connect the wires of the tester to the cut wires of the seat occupancy sensor in a way that the tester is connected to the car's installation. Be careful, do not to connect the tester to the seat belt buckle sensor or other sensors of the seat.

Connecting the seat belt buckle sensor tester
Read the general safety rules and rules of conduct before starting work!

Find the seat belt buckle sensor connection point to the car's installation under the seat. Depending on the tester version (wires with pins, plug or without termination), proceed as follows:
Wires with pins:
- Check whether the colors of the wires in the original sensor are the same as in the tester and whether the wires are positioned in the plug in the same way. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below.
- Disconnect the plug of the seat belt buckle sensor from the car's installation.
- Note which wire is in which hole.
- Take the wires out of the seat belt sensor plug.
- Insert the wires of the tester into the plug in the same order as you previously noted.
- Connect the plug to the car's installation

Wires with plug:
- Check whether the colors of the wires in the original sensor are the same as in the tester. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below.
- Disconnect the seat belt buckle sensor plug from the car's installation.
- Connect the plug of the tester to the car's installation.

Wires without termination:
- Check whether the colors of the wires in the original sensor are the same as in the tester. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below.
- Cut the wires of the seat belt buckle sensor.
- Connect the wires of the tester to the cut wires of the seat belt buckle sensor in a way that the tester is connected to the car's installation. Be careful, do not to connect the tester to the seat mat sensor or other sensors of the seat.

WEEE Information and Environmental Protection

Damaged or worn device should be handed over to a specialist collection point for electronic waste or taken to a local recycling point in accordance with the regulations in force in your country. This procedure is required by the provisions of the Directive 2012/19/EU of the European Parliament and of the Council (WEEE) on waste electrical and electronic equipment and its corresponding national regulations.

EU Declaration of Conformity

Herby, KDL Technologies Krystian Rzepka declares that the device is in compliance with Directive 2011/65/UE (RoHS). The full text of the EU declaration of conformity is available at the following address: https://www.kdl-tech.pl

Warranty Information

The product is covered by a 24-month manufacturer's warranty. Te warranty is immediately rendered void if the customer has damaged/misused the tester. The warranty is also void if customer uses the device in a way that it is not originally intended for or continue to use the tester if the customer noticed that it is damaged.